

**ELC**  
Community Description and Classification

Site: B2W 501 Polygon: 4

Surveyor(s): SAM Date: Aug 18/11 Time start: 13:52

UTMZ: 17T UTMZ:  UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant form	Community
<input checked="" type="checkbox"/> Terrestrial <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Aquatic Site <input type="checkbox"/> Open Water <input checked="" type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input checked="" type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alover <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD <input type="checkbox"/> Grassland <input type="checkbox"/> Forb. <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input checked="" type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barran <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input checked="" type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal; To)
1	3-2	4	White Pine >> Tamarack >> Aw > Ew
2	3	2	Apple > Sour Cherry > Aw
3	5-4	2	Common Buckhorn > Choke Cherry
4	5-6	1	Galice Aster > Virginia Creeper

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

Stand Composition: Size Class Analysis:  <10  10-24  25-50  >50

Standing Snags:  <10  10-24  25-50  >50

Deadfall / Logs:  <10  10-24  25-50  >50

BA: N/A

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: CUP 3 Code: CUP 3

Vegetation Type: White Pine Coniferous Plantation Type Code: CUP 3-2

Inclusion:  Code:

Complex:  Code:

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
<u>N/A</u>						
Total						100
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Pit/Auger # WP 33 ① WP 35 ②

Site Metrics	Zone	Moisture Regime
UTM	Fasting	
	Nothing	
Slope	Position	
	Aspect	
	Percent	
	Slope	
	Length	
	Mottles	
	Gley	
	Water Table	
	Carbonates	
	Bedrock	

Summary

Soil Horizon Description	Depth from zero	Texture	% CF	Depth from zero	Texture	% CF	Depth from zero	Texture	% CF	Depth from zero	Texture	% CF	% CF
1													
2													
3													
4													
Moisture Regime													
Drainage													



<b>ELC</b>  <b>WILDLIFE</b>	SITE: <u>BLW 501</u>	
	POLYGON: <u>(4)</u>	
	DATE: <u>Aug 18/11</u>	
	SURVEYORS: <u>SAH</u>	
	START TIME: <u>1309h</u>	END TIME: <u>1352h</u>

TEMP (°C): <u>27</u>	CLOUD (10th): <u>2</u>	WIND: <u>2</u>	PRECIPITATION: <u>nil</u>
CONDITIONS: <u>hot, breezy, clear + sunny</u>			

**POTENTIAL WILDLIFE HABITAT:**

<input type="checkbox"/>	VERNAL POOLS	<input checked="" type="checkbox"/>	SNAGS
<input type="checkbox"/>	HIBERNACULA	<input type="checkbox"/>	FALLEN LOGS

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
B	BCCH	SM		4					
B	EAKI	VO		2					
B	BARS	OB		2					
B	SOSP	SM		3					
B	BLJA	VO		1					
B	HowR	VO		1					
* B	GHOW	VO	calling @ mid-day	1					

**FAUNAL TYPE CODES (TY):**  
 B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER

**EVIDENCE CODES (EV):**

**BREEDING BIRD - POSSIBLE:**  
 SH = SUITABLE HABITAT SM = SINGING MALE

**BREEDING BIRD - PROBABLE:**  
 T = TERRITORY D = DISPLAY P = PAIR  
 A = ANXIETY BEHAVIOUR N = NEST BUILDING V = VISITING NEST

**BREEDING BIRD - CONFIRMED:**  
 DD = DISTRACTION NU = USED NEST FY = FLEDGED YOUNG  
 NE = EGGS NY = YOUNG FS = FOOD/FECAL SACK  
 AE = NEST ENTRY

**OTHER WILDLIFE EVIDENCE:**  
 OB = OBSERVED VO = VOCALIZATION CA = CARCASS  
 DP = DISTINCTIVE PARTS HO = HOUSE/DEN FY = EGGS/YOUNG  
 TK = TRACKS FE = FEEDING EVIDENCE SC = SCAT  
 SI = OTHER SIGNS (specify)

**ELC** Community Description and Classification  
 Site: BLW 501 Polygon: 5  
 Surveyor(s): SAM Date: Aug 18/11 Time start: 13:41  
 UTMZ: 17T UTMZ: 17T UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <input type="checkbox"/> Estuary <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Cultural <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Treed	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Lacustrine <input checked="" type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input checked="" type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 1 sp) (=> Much Greater Than; > Greater Than; = About Equal To)
1	2	3	Black walnut > White Elm > White Ash
2	4	3	Black walnut > Star Birch > Smooth Brome
3	5-4	4	Jewelweed > Rice Cutgrass > Smooth Goldenrod
4	6-5	3	Few Manna Grass > Nodding Smartweed > Bittersweet Nightshade

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

**Stand Composition:** Size Class Analysis: N/A  
 Standing Snags: N/A  
 Deadfall / Logs: N/A

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecobiter: Deciduous Plantation Code: CUP1  
 Vegetation Type: Black walnut Deciduous Code: CUP1-3  
 Installation: Code: -  
 Complex: Code: -

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Relative
<u>N/A</u>						
Total						
Basal Area (BA)						
Dead						100

**Soils Ontario and ELC Soils Description**

P11/Auger # wpa340

Site Metrics	Zone	Easting	Northing	Position	Aspect	Percent	Slope	Length	Summary
UTN									
Slope									
Mottles									
Gley									
Water Table									
Carbonates									
Bedrock									

Soil Horizon Description	Depth from zero	Texture	Depth from zero	Texture	Depth from zero	Texture	Depth from zero	Texture	% Surface Stone/Rock	Moisture Regime	Drainage
1	0	CL	22	C						Very Moist (C)	Imperfect (S)
2											
3											
4											







<b>ELC</b>	SITE: <u>BLW 501</u>		
	POLYGON: <u>5</u>		
WILDLIFE	DATE: <u>Aug 18/11</u>		
	SURVEYORS: <u>SM</u>		
	START TIME: <u>1327</u>	END TIME: <u>1341h</u>	
TEMP (°C): <u>27</u>	CLOUD (10th): <u>2</u>	WIND: <u>2</u>	PRECIPITATION: <u>h?</u>
CONDITIONS:			

**POTENTIAL WILDLIFE HABITAT:**

<input type="checkbox"/> VERNAL POOLS	<input checked="" type="checkbox"/> SNAGS
<input type="checkbox"/> HIBERNACULA	<input checked="" type="checkbox"/> FALLEN LOGS

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
B	HWR	VO		4					
BB	GRCA	VO		1					
B	SOSP	SM		1					

**FAUNAL TYPE CODES (TY):**

B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER

**EVIDENCE CODES (EV):**

**BREEDING BIRD - POSSIBLE:**

SH = SUITABLE HABITAT SM = SINGING MALE

**BREEDING BIRD - PROBABLE:**

T = TERRITORY D = DISPLAY P = PAIR  
A = ANXIETY BEHAVIOUR N = NEST BUILDING V = VISITING NEST

**BREEDING BIRD - CONFIRMED:**

DD = DISTRACTION NU = USED NEST FY = FLEDGED YOUNG  
NE = EGGS NY = YOUNG FS = FOOD/FECAL SACK  
AE = NEST ENTRY

**OTHER WILDLIFE EVIDENCE:**

OB = OBSERVED VO = VOCALIZATION CA = CARCASS  
DP = DISTINCTIVE PARTS HO = HOUSE/DEN FY = EGGS/YOUNG  
TK = TRACKS FE = FEEDING EVIDENCE SC = SCAT  
SI = OTHER SIGNS (specify)



**Bluewater Feature: 504\_BLW1542**

(Properties that contain Features within 125m from Collection lines and 171.5m from Turbines)

wp# 394  
phus 103004-013

wp# 393  
phus 103003-103003



Route:  
Avalancha Collection Line  
Collection Buffer (125m)  
Larrea Buffer (171.5m)

Other Information Includes:  
Turbine Availability Intersect  
Property Zone  
On-water Wind Energy Centre



August 28, 2011

414359  
481867  
C.W. (aligned with road)



Site: 504\_Blw 1542 Polygon: 2  
 Surveyor(s): SAM Date: Oct-6-04 Time start: 1802  
 UTMZ: 177 UTMZ: 445 354 UTMN: 48 6071  
 W.P. # 333

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	%
N/A						
Total						100
Basal Area (BA)						
Dead						

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input checked="" type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll, Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input checked="" type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

Stand Description

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp)
1	7 -<0.2m	8 > 0.2-0.5m	N/A > A > Aw
2		5 > 0.5-1m	Can. Puckberry > Nuts > Cotonegus sp > N/A
3		2 10% - 25%	Smooth Broom > Nuts > Can. Goldenrod
4		1 25% - 50%	Strawberry > Can. Hic. Mustard > St. Johns-wort > Grape

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

Stand Composition:	Size Class Analysis:
Standing Snags: <10	<10
Deadfall / Logs: <10	<10
	10-24
	25-50
	>50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:	Pioneer	Young	Mid-Age	Mature	Old Growth
			<input checked="" type="checkbox"/>		

Ecolite:	Vegetation Type:	Inclusion:	Complex:
Mineral Cultural woodland Ecotone	CW1		

Community Profile Diagram/Comments

\* at very edge of forest / within swamp margin. Any prgn portion of feature within the buffer at it want have been class. Aced within swamp thicket.

Notes:

Soils Ontario and ELC Soils Description

Site Metric	PIV/Auger #	Soils Description		Summary
		Moisture Regime	Drainage	
Zone				
Easting				
Northing				
Position				
Aspect				
Percent				
Slope				
Length				
Mottles				
Gley				
Water Table				
Carbonates				
Bedrock				
Depth to ...	1	Depth from zero	% CF	% CF
		Texture		
		Depth from zero	% CF	% CF
		Texture		
Soil Horizon Description	2	Depth from zero	% CF	% CF
		Texture		
		Depth from zero	% CF	% CF
		Texture		
Soil Horizon Description	3	Depth from zero	% CF	% CF
		Texture		
		Depth from zero	% CF	% CF
		Texture		
Soil Horizon Description	4	Depth from zero	% CF	% CF
		Texture		
		Depth from zero	% CF	% CF
		Texture		
Moisture Regime	% Surface Stone/Rock			
	Moisture Regime			
Drainage				



SCH WP 3334

**ELC** Community Description and Classification

Site: BLW-1542 Polygon: (2)  
Surveyor(s): SAM Date: Oct-6/01 Time start: 19:00h finish: 18:42h  
UTMZ: 17T UTMZ: 44S100 UTMN: 4816597

### Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input checked="" type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD	<input type="checkbox"/> River
	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input checked="" type="checkbox"/> Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Roll, Upland	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Bog
<b>History</b>		<input type="checkbox"/> Talus	<input type="checkbox"/> Mixed	<input type="checkbox"/> Barren
<input checked="" type="checkbox"/> Natural		<input type="checkbox"/> Crvicer/Cave		<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
<b>Cover</b>		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input checked="" type="checkbox"/> Tree		<input type="checkbox"/> Bluff		<input checked="" type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

### Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	HA >>> Be >> Aw
2	3	3	HA >>> DP >> Aw
3	5-4	2-3	Choice Cherry >> Aw >> BK R >> sp >> Galina Astor
4	6-7	3-4	2-9-2-9 Galina sp >> 6-10 sp >> HA

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 50 - 60%

Stand Composition:	Size Class Analysis:			
	<10	10-24	25-50	>50
Standing Snags:	A	A	A	R
Deadfall / Logs:	A	O	R	R

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Dry-Fresh Sugar Maple Deciduous Forest Code: FODS  
Vegetation Type: Dry-Fresh Sugar Maple Deciduous Forest Code: FODS-1  
Inclusion: Code:   
Complex: Code:

### Community Profile Diagram/Comments

Successional Forest

### Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Prism Factor	Total	Rel. Avg.
Be	1	1				2	8
HA	9	4				13	73
DP	1	2				3	13
Aw	1					1	4
<b>Total</b>						24	100
<b>Basal Area (BA)</b>	12	12				44	(BA)
<b>Dead</b>	24	24					

### Soils Ontario and ELC Soils Description

Pit/Auger #	Soils Description				Summary
UTM	Zone	Easting	Northing	Position	Moisture Regime
Zone	Aspect	Percent	Slope	Length	Drainage
Easting	Mottles				Effective Texture (indicate below)
Northing	Gley				
Position	Water Table				% CF
Aspect	Carbonates				% CF
Percent	Bedrock				% CF
Slope	Depth from zero				% CF
Length	Texture				% CF
Depth to...					% CF
Gley					% CF
Water Table					% CF
Carbonates					% CF
Bedrock					% CF
Depth from zero					% CF
Texture					% CF
Depth from zero					% CF
Texture					% CF
Depth from zero					% CF
Texture					% CF
Depth from zero					% CF
Texture					% CF
% Surface Stoner/Rock					% CF
Moisture Regime					% CF
Drainage					% CF

Over



VASCULAR PLANT CHECKSHEET

Location: S04 - BLW1542

Date: Oct 6/11

Observer: SAM

Job Number:

DICOT HERBS						MONOCOT HERBS												
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	
Acillea millefolia						Eriogonum annuum						Plantago lanceolata						Allium plantago-aquatica
Actaea pachyoda	X					Eriogonum philadelphicus						Plantago major						Allium tricoccum
Actaea rubra						Eriogonum strigosus						Plantago rugelii						Allium
Agallium						Erysimum cheiranthoides						Potofhyllum peltatum						Arisaema triphyllum
Agrimonia gryposepala						Eupatorium maculatum						Polygonum						Asparagus officinalis
Alliaria petiolaris	X					Eupatorium perfoliatum						Polygonum						Calla palustris
Amaranthus retroflexus						Eupatorium rugosum						Polygonum						Cirsium boreale
Ambrosia artemisiifolia						Euphorbia						Polygonum leptophyllum						Convallaria majus
Amphicarpaea bryceana						Euthamia graminifolia						Polygonum persicaria						Cypripedium calceolus
Anaphalis margaritacea						Fragaria virginiana	X					Potentilla						Elodea canadensis
Anemone						Fragaria vesca						Potentilla norvegica						Epipactis helleborine
Anemone canadensis						Galeopsis tetrahit						Potentilla recta						Erythronium americanum
Anemone virginiana						Gallium						Preranthus alba						Hemocallis fulva
Antennaria neglecta						Gallium						Prunella vulgaris						Iris versicolor
Apocynum androsaemifolium						Gallium palustre						Pyrola elliptica						Lemna minor
Apocynum cannabinum						Gallium triflorum	X					Ranunculus						Lemna trisulca
Aquilegia canadensis						Geranium maculatum	X					Ranunculus abortivus						Lilium
Arabis nudicaulis						Geranium robertianum						Ranunculus acris						Mianthemum canadense
Arctium minus						Geum aleppicum	X					Rudbeckia hirta						Mianthemum racemosa
Artemisia						Geum canadense	X					Rumex acetosella						Mianthemum stellata
Asarum canadense	X					Geum						Rumex crispus						Plantifera
Asclepias incarnata						Glecoma hederacea						Rumex						Portulaca cordata
Asclepias syriaca						Hepatica acutiloba						Sanguinaria canadensis	X					Polygonatum pubescens
Aster pilosus	X					Hesperis matronalis						Sanicula marylandica						Potamogeton crispus
Aster cordifolius						Hieracium aurantiacum						Saponaria officinalis						Potamogeton pectinatus
Aster eriooides						Hieracium caespitosum						Satureja vulgaris						Potamogeton
Aster lanceolatus						Hieracium						Scutellaria galericulata						Potamogeton
Aster latiflorus	X					Hydrophyllum virginianum						Silene vulgaris						Potamogeton
Aster macrophyllus						Hypericum perforatum	X					Slum suave						Sagittaria latifolia
Aster novae-angliae						Impatiens capense						Solanum dulcamara						Styrnchim montanum
Aster puniceus						Inula helentium						Solidago						Smilax herbacea
Barbarea vulgaris						Lactuca						Solidago altissima	X					Spiranthes carnea
Bidans cernua						Laportea canadensis						Solidago caesia	X	X				Spiridaea polytricha
Bidens frondosa						Lapsana communis						Solidago canadensis	X	X				Streptopus roseus
Boehmeria cylindrica						Leonurus cardiaca						Solidago flexicollis	X	X				Trillium erectum
Caltha palustris						Lepidium						Solidago gigantica						Trillium grandiflorum
Calyptostegia sepium						Linaris vulgaris						Solidago nemoralis						Uvularia grandiflora
Cardamine diphylla						Urtica dioica						Solidago rugosa						
Cardamine						Labella						Sonchus olerensis						
Gaulophyllum thalictroides	X					Lobelia inflata						Sonchus asper						
Cerastium fontanum						Lotus corniculatus						Stellaria						
Ceratophyllum demersum						Lycopus americanus						Tanacetum vulgare						
Chelidonium majus						Lycopus						Taraxacum officinale						
Chenopodium album						Lysimachia ciliata						Thalictrum dioicum						
Chrysanth. leucanthemum						Lythrum escholtzia						Thalictrum pubescens						
Cichorium intybus						Medicago lupulina						Taraxacum officinale						
Cicuta						Medicago sativum						Taraxacum officinale						
Cirsium leucostoma						Melilotus alba						Trifolium pratense						
Cirsium arvense						Menisima arvensis						Trifolium repens						
Cirsium vulgare						Mimulus ringens						Trifolium repens						
Cornella virginiana						Mimulus ringens						Tussilago farfara						
Cirsium boreale						Mibella diphylla						Urtica dioica						
Coryza canadensis						Morinda fishulosa						Urticaria vulgaris						
Coronilla varia						Myosotis						Verbascum thapsus						
Cyananthum rossicum						Nasturtium officinale						Verbena hastata						
Cynoglossum officinale						Napeta castria						Verbena urticifolia						
Daucus carota						Nuphar variegatum						Veronica						
Dasmodium canadense						Nymphaea odorata						Veronica officinalis						
Dianthus armeria						Oenothera biennis						Viola cracca						
Dipsacus fullonum						Osmorhiza						Viola tetrapinna						
Echinocystis lobata						Oxalis stricta						Viola sp.						
Echium vulgare						Phytolacca octocarpa						Viola	X					
Epilobium						Physalis heterophylla						Viola pubescens						
Epilobium dilatum												Viola sororia						
Epilobium hirsutum																		
Epilobium parviflorum																		

- 1: Polygon 1
- 2: Polygon 2
- 3:

- 4:
- 5:
- 6:

CONIFERS						TREES and SHRUBS						GRAMINOIDS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Abies balsamea						+ Rosa multiflora		X				Agrostis gigantea					
Juniperus communis						Rosa						Agrostis stolonifera					
Juniperus virginiana						Rubus allegheniensis						Agropyron repens					
Larix laricina						Rubus idaeus						Alopecurus					
Picea abies						Rubus occidentalis						Bromus inermis		X			
Picea glauca						Rubus odoratus						Calamagrostis canadensis					
Pinus resinosa						Rubus pubescens						Carex arctata					
Pinus strobus						Salix alba						Carex aurea					
Pinus sylvestris						Salix amygdaloides						Carex bebbii					
Thuja occidentalis						Salix bebbiana						Carex blanda			X		
Tsuga canadensis		X				+ Salix discolor						Carex gracillima					
						Salix eriocephala						Carex granulata					
						Salix exigua						Carex hystericina					
						Salix lucida						Carex pensylvanica					
						Salix petiolaris						Carex radiata					
TREES and SHRUBS						+ Salix purpurea						Carex retrorsa					
Acer negundo						Salix x rubens						Carex stipata					
Acer rubrum						+ Salix						Carex stricta					
Acer saccharinum						Sambucus canadensis						Carex vulpinoides					
Acer saccharum		X	X			Sambucus racemosa						Carex <i>communis</i>				X	
Acer spicatum						Sorbus aucuparia						Carex <i>plantaginifolia</i>				X	
Alnus rugosa						Spiraea alba						Carex					
Amelanchier						Syringa vulgaris						Carex					
Berberis thunbergii						+ Tilia americana		X				Carex					
Betula alleghaniensis						Ulmus americana		X	X			Carex					
Betula papyrifera						Ulmus						Carex					
Carpinus caroliniana						Vaccinium						Carex					
Carya cordiformis						Viburnum lentago						Carex					
Celastrus scandens						Viburnum opulus						Cyperus					
Cornus alternifolia						Viburnum						Cyperus					
Cornus amomum						Vitis riparia		X	X			Dactylis glomerata			X		
Cornus rugosa												Danthonia spicata					
Cornus stolonifera												Echinochloa crus-galli					
Corylus cornuta												Eleocharis erythropoda					
Crataegus monogyna												Eleocharis					
Crataegus punctata												Elymus virginicus					
Crataegus sp.		X										Elymus					
Crataegus												Festuca arundinacea					
Diervilla lonicera												Glyceria striata					
Fagus grandifolia			X	X								Glyceria					
Fraxinus americana		X	X			FERNS						Juncus dudleyi					
Fraxinus nigra						Adiantum pedatum						Juncus effusus					
Fraxinus pennsylvanica						Athyrium filix-femina			X			Juncus tenuis					
Ilex verticillata						Botrychium multifidum						Juncus					
Juglans cinerea						Botrychium virginianum						Juncus					
Juglans nigra						Cystopteris bulbifera						Leersia oryzoides					
Lonicera Morrowi						Dryopteris carthusiana						Muhlenbergia					
Lonicera tatarica						Dryopteris cristata						Oryzopsis asperifolia					
Lonicera						Dryopteris marginalis						Panicum					
Malus pumila		X				Dryopteris						Panicum					
Ostrya virginiana			X	X		Equisetum arvense						Phalaris arundinacea					
Parthenocissus inserta			X	X		Equisetum hyemale						Phleum pratense					
Populus balsamifera						Equisetum variegatum						Phragmites australis					
Populus grandidentata						Equisetum						Poa compressus					
Populus tremuloides						Gymnocarpium dryopteris						Poa pratensis					
Populus						Lycopodium digitatum						Poa					
Prunus pennsylvanica						Lycopodium obscurum						Scirpus atrovirens					
Prunus serotina						Lycopodium						Scirpus cyperinus					
Prunus virginiana		X	X			Lycopodium						Scirpus validus					
Prunus <i>ceva 545</i>		X				Matteucia struthiopteris						Scirpus					
Quercus macrocarpa						Onoclea sensibilis						Setaria					
Quercus rubra						Osmunda cinnamomina						Sparganium					
Quercus						Osmunda regalis						Typha angustifolia					
Rhamnus cathartica		X				Polystichum acrostichoides						Typha latifolia					
Rhus radicans						Pteridium aquilinum						Typha X glauca					
Rhus typhina						Thelypteris palustris											
Ribes americana																	
Ribes cynosbati																	
Ribes x rubrum																	
Robinia pseudo-acacia																	

<b>ELC</b>  <b>WILDLIFE</b>	<b>SITE:</b> 504 BLW 1542		
	<b>POLYGON:</b> ① d 2		
	<b>DATE:</b> Oct. 6/11		
	<b>SURVEYORS:</b> SAM		
	<b>START TIME:</b> 1802h	<b>END TIME:</b> 1818h	
<b>TEMP (°C):</b> 16	<b>CLOUD (10th):</b> /	<b>WIND:</b> 0-1	<b>PRECIPITATION:</b> nil
<b>CONDITIONS:</b>			

**POTENTIAL WILDLIFE HABITAT:**

<input checked="" type="checkbox"/> X	VERNAL POOLS	<input checked="" type="checkbox"/> X	SNAGS
	HIBERNACULA		FALLEN LOGS

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
① B	Ds wo	VO OB		1					
B	BCCH	VO		3					
B	GKCA	VO		1					
B	5OSP	VO		1					
<hr/>									
② B	BLJA	OB		2					

**FAUNAL TYPE CODES (TY):**

B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER

**EVIDENCE CODES (EV):**

**BREEDING BIRD - POSSIBLE:**

SH = SUITABLE HABITAT SM = SINGING MALE

**BREEDING BIRD - PROBABLE:**

T = TERRITORY D = DISPLAY P = PAIR  
A = ANXIETY BEHAVIOUR N = NEST BUILDING V = VISITING NEST

**BREEDING BIRD - CONFIRMED:**

DD = DISTRACTION NU = USED NEST FY = FLEDGED YOUNG  
NE = EGGS NY = YOUNG FS = FOOD/FECAL SACK  
AE = NEST ENTRY

**OTHER WILDLIFE EVIDENCE:**

OB = OBSERVED VO = VOCALIZATION CA = CARCASS  
DP = DISTINCTIVE PARTS HO = HOUSE/DEN FY = EGGS/YOUNG  
TK = TRACKS FE = FEEDING EVIDENCE SC = SCAT  
SI = OTHER SIGNS (specify)



# Bluewater Feature: 504\_BLW1541/1542

(Additional properties to be surveyed due to changes in the Collection & Road layout)

October 17, 2011

0 25 50 100 Meters

↑

- Heads
- Access/Collection Line
- Survey Line Completed
- Turbine Duff: (171.5m)
- FIC Survey Completed
- Turbine Superstructure Increased
- Property Failure
- Bluewater Vire Gully/Carrie



Bluewater Access Road / SM19 Turbine ELC Completed May 13/11 -JP

- Bluewater Access Road / SM19 Turbine ELC Completed May 13/11 -JP**
-  ELC to Elevation
  -  Wastewater
  -  No Access (as of August 2011)
  -  Access
  -  20' Buffer



**Bluewater Access Road / Collection Lines**

**SM19**

**ELC**

① No power to turbines 10/7/10 to 1/1/11

② No power to turbines 10/7/10 to 1/1/11

③ No power to turbines 10/7/10 to 1/1/11

④ No power to turbines 10/7/10 to 1/1/11

⑤ No power to turbines 10/7/10 to 1/1/11

⑥ No power to turbines 10/7/10 to 1/1/11

⑦ No power to turbines 10/7/10 to 1/1/11

⑧ No power to turbines 10/7/10 to 1/1/11

⑨ No power to turbines 10/7/10 to 1/1/11

⑩ No power to turbines 10/7/10 to 1/1/11

ELC Community Description and Classification

Site: BLW 506 Polygon: 0

Surveyor(s): SAM Date: Aug. 18/11 Time start: 15:48h

UTMZ: 17T UTMZ: UTMN

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input checked="" type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Rail. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input checked="" type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Species In Order of Decreasing Dominance (up to 4 sp)  
 (→ Much Greater Than; > Greater Than; = About Equal; To)

1 Salix alba  
 2 Salix bebbiana  
 3 Salix serotina  
 4 Joe Pye weed  
 5 Jewelweed

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

**Stand Composition:**

Size Class Analysis:  < 10  10-24  25-50  > 50  
 Standing Snags:  < 10  10-24  25-50  > 50  
 Deadfall / Logs:  < 10  10-24  25-50  > 50

BA: \_\_\_\_\_

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

**Com. Age:**  Pioneer  Young  Mid-Age  Mature  Old Growth

**Ecotope:** Mineral Shallow Marsh Ecotope Code: MAS2  
**Vegetation Type:** Forb Mineral Shallow Marsh Type Code: MAS2-9  
**Inclusion:** \_\_\_\_\_ Code: \_\_\_\_\_  
**Complex:** \_\_\_\_\_ Code: \_\_\_\_\_

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg	Prism Factor
<u>N/A</u>							<u>2</u>
Total							
Basal Area (BA)							
Dead							

**Soils Ontario and ELC Soils Description**

PIUAuger #	Zone	Ensting	Northing	Position	Aspect	Percent	Slope	Length	Summary
<u>WP237 ①</u>									
UTM									
Site Metrics									
Mottles									
Glays									
Water Table									
Carbonates									
Bedrock									

**Soil Horizon Description**

Depth to ...	Depth from zero	Texture	% CF	% CF	% CF	% CF
1	<u>0</u>	<u>OA</u>	<u>36</u>	<u>15</u>	<u>0</u>	<u>0</u>
2	<u>36</u>	<u>C</u>	<u>64</u>	<u>15</u>	<u>0</u>	<u>0</u>
3	<u>64</u>	<u>C</u>	<u>64</u>	<u>15</u>	<u>0</u>	<u>0</u>
4	<u>0</u>	<u>C</u>	<u>64</u>	<u>15</u>	<u>0</u>	<u>0</u>
% Surface Stone/Rock						
Moisture Regime	<u>Very Moist (6)</u>					<u>Very Moist (6)</u>
Drainage	<u>Poor (6)</u>					<u>Poor (6)</u>

<b>ELC</b>  Plant Species List	SITE: BLW 506
	POLYGON: <del>①</del> ①
	DATE: Aug. 18/11
	SURVEYOR(S): SAM

LAYERS: 1 = CANOPY 2 = SUB-CANOPY 3 = UNDERSTORY 4 = GROUND (GRD.) LAYER  
 ABUNDANCE CODES: R = RARE O = OCCASSIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER				COLL.
	1	2	3	4	
Juglans			A	D	
Joe Pye		D	D	A	
<del>Bl</del> Cattail		A			
Tall G' rod			O		
Pam. cld. Aster					
RO Dogwood			A		
NE Aster					
Sm Blk Currant			O		
Sour Cherry		O			
Blk Elder		A			
Grape					
Pussy <del>Willow</del> Willow			O		
No Willow Herb			D	D	
White Willow	O				
Bebb's Willow			D		
-Salicaceae	A	D			
Blueberry vine					
Blk Bulrush			O		
SS Bulrush					
Swamp Aster			O		
Boneset			O		
Smooth Goldenrod			O		

SPECIES CODE	LAYER				COLL.
	1	2	3	4	